## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

# **Listing of Claims:**

1-139. (Canceled)

140. (Currently Amended) A method implemented on a computer system via a plurality of software modules for managing a workflow process, the method assisting a user with procurement decisions, sourcing decisions and strategic sourcing decisions in an enterprise regarding one or a plurality of items, and comprising the steps of:

discovering, via one or more of the software modules by a computer system, internal and external data related to at least one item based on user-defined parameters a plurality of components to be procured by an enterprise, wherein the discovered internal and external data is extracted from a plurality of data sources internal and external to the enterprise the internal data originates from one or more data sources internal to the enterprise, and wherein the external data originates from one or more data sources external to the enterprise;

storing, by the computer system, the discovered internal and external data in a data mart;

identifying, via one or more of the software modules, one or more conditions related to the at least one item or related to procurement, sourcing, and strategic sourcing in the enterprise of the at least one item;

if at least one of the one or more conditions is satisfied, generating, via one or more of the software modules, at least one alert for the user;

analyzing, via one or more of the software modules by the computer system, the discovered internal and external data, wherein an assessment is made of the using a first analysis module to determine criticality ratings for the plurality of components, wherein the criticality rating for a component indicates the strategic importance of the component to operations of the enterprise, impact or potential impact of the discovered internal and external data on

procurement decisions, sourcing decisions and strategic sourcing decisions in the enterprise with respect to the at least one item, and wherein the assessment analyzing performed using the first analysis module is based, at least in part, on one or more a first set of user-defined parameters that qualify the internal or external data;

analyzing, by the computer system, the internal and external data using a second analysis module to forecast prices for the plurality of components, wherein the analyzing performed using the second analysis module is based on a second set of user-defined parameters that qualify the internal or external data;

analyzing, by the computer system, the internal and external data using a third analysis module to determine optimal inventory levels for the plurality of components, wherein the analyzing performed using the third analysis module is based on a third set of user-defined parameters that qualify the internal or external data;

recommending to the user, via one or more of the software modules by the computer system, one or more proposed actions to take with respect to the procurement, sourcing or strategic sourcing of the at least one item on behalf of the enterprise plurality of components based on the analysis of the discovered internal and external data analyzing performed using the first, second, and third analysis modules; and

providing to the user, via one or more of the software modules by the computer system, one or more computer-initiated options for fully or partially executing an action in the one or more proposed actions.

- 141. (Previously Presented) The method of claim 140, wherein the discovered internal and external data stored in the data mart is organized for querying and report generation, and represented to the user in a plurality of formats.
- step of producing, via one or more of the software modules by the computer system, one or more reports based on the analysis of the discovered internal and external data analyzing performed using the first, second, and third analysis modules, wherein the one or more reports provide the user with information regarding the an impact or potential impact of the discovered internal and

external data on procurement decisions, sourcing decisions and strategic sourcing decisions in the enterprise with respect to the at least one item plurality of components, and wherein the one or more reports include information represented and/or displayed in one or more graphical formats.

- 143. (Currently Amended) The method of claim 142, wherein the <u>one or more</u> graphical formats of the information include tables, charts, graphs, and/or maps a table, chart, graph, or map.
- step of producing, via one or more of the software modules by the computer system, one or more reports based on the analysis of the discovered internal and external data analyzing performed using the first, second, and third analysis modules, wherein the one or more reports provide the user with information regarding the an impact or potential impact of the discovered internal and external data on procurement decisions, sourcing decisions and strategic sourcing decisions in the enterprise with respect to the at least one item plurality of components, and wherein the one or more reports include information represented and/or displayed in one or more non-graphical formats.
- 145. (Currently Amended) The method of claim 144, wherein the <u>one or more</u> non-graphical formats of the information include news bulletins, alert boxes, and audio messages a news bulletin, an alert box, or an audio message.

### 146-149. (Canceled)

150. (Currently Amended) The method of claim 140, wherein the step of discovering internal and external data assists the user in identifying parameters for criteria relevant to procurement decisions, sourcing decisions and strategic sourcing in [[an]] the enterprise regarding one or a the plurality of items components.

151. (Previously Presented) The method of claim 150, wherein the parameters are user-defined.

#### 152-154. (Canceled)

- 155. (Currently Amended) The method of claim 140, wherein the <u>step steps</u> of analyzing the discovered internal and external data <u>using the first</u>, <u>second</u>, <u>and third analysis modules</u> uses data from the step of discovering the internal and external data <del>and the step of identifying one or more conditions related to the at least one item</del> to produce one or more reports intended to assist the user in procurement decisions, sourcing decisions, <u>and/or or</u> strategic sourcing decisions.
- 156. (Currently Amended) The method of claim 140, wherein the step of recommending to the user one or more proposed actions uses data from the step steps of analyzing the discovered internal and external data using the first, second, and third analysis modules to make recommendations for possible actions based on the discovered internal and external data.
- 157. (Currently Amended) The method of claim 140, wherein the <u>step steps</u> of analyzing the discovered internal and external data <u>using the first</u>, second, and third analysis <u>modules</u> collects data from the step of discovering the internal and external data <del>related to the at least one item based on user-defined parameters</del> and additional data from user input to make recommendations in real time.
- 158. (Currently Amended) The method of claim 140, wherein the step of executing one or more actions uses data from the step steps of analyzing the discovered internal and external data using the first, second, and third analysis modules as input for the user to decide which recommendations to execute and when to execute them.

159. (Previously Presented) The method of claim 140, wherein the step of discovering internal and external data collects, integrates and displays graphical and non-graphical data.

### 160-161. (Canceled)

162. (Currently Amended) The method of claim 140, wherein the step of discovering internal and external data includes extraction, transformation and loading of data, and also scanning of data that has been aggregated across a single business unit or across multiple business units of the same enterprise, conducting of real-time searching, and customizing of real-time alerts and news feeds.

### 163-168. (Canceled)

- 169. (Previously Presented) The method of claim 140, wherein the step of executing one or more actions enables the user to set automation levels at either a first level, which provides a greater range of permitted automated actions, or at a second level, which provides a more restricted range of permitted automated actions.
- 170. (Currently Amended) The method of claim 169, wherein the additional automation levels may be selected are selectable by the user, providing a plurality of customized ranges of permitted automated actions.
- 171. (Previously Presented) The method of claim 140, wherein the step of executing one or more actions provides agents that follow user-defined rules to enable hands-free handling of user-defined exceptions and processes.
- 172. (Currently Amended) The method of claim 140, wherein the step of executing one or more actions initiates a transaction via another application, carries out one or a plurality of transactions, and/or and changes information in [[an]] the another application.

- 173. (Currently Amended) The method of claim 140, wherein the step of executing one or more actions includes providing agents that follow user-defined rules to enable hands-free handling of user-defined exceptions and processes, initiating a transaction via another application, and carrying out certain transactions, wherein the certain transactions include generating and sending out a RFQ, and/or and changing discovered internal and external data in an internal application.
- 174. (Currently Amended) The method of claim 140, wherein the internal and external data related to at least one item and resulting from the steps in the workflow process are reintegrated into the data mart after each action is processed step of the method is performed, and wherein the data are is continuously incorporated into the data mart automatically or at predetermined or other intervals.

### 175-181. (Canceled)

- 182. (Currently Amended) The method of claim 140, wherein the one or more software modules alert further comprising alerting the user of conditions that meet the parameters set by the user and are relevant to the user's tasks in procurement, sourcing, and/or or strategic sourcing.
- 183. (Previously Presented) The method of claim 182, wherein the conditions include values, combinations of values, and conditions for the values and combinations of values.

### 184-229. (Canceled)

230. (New) The method of claim 140 further comprising:

analyzing, by the computer system, the internal and external data using a fourth analysis module to identify components in the plurality of components that are shortage risks, wherein the analyzing performed using the fourth analysis module is based on a fourth set of user-defined parameters that qualify the internal or external data.

231. (New) The method of claim 140 further comprising:

analyzing, by the computer system, the internal and external data using a fourth analysis module to determine, for each component in the plurality of components, an allocation of a purchase quantity of the component across a set of suppliers, wherein the allocation is based on contractual obligations with the set of suppliers and performance ratings for the set of suppliers, and wherein the analyzing performed using the fourth analysis module is based on a fourth set of user-defined parameters that qualify the internal or external data.

232. (New) The method of claim 140 further comprising: receiving, by the computer system, a condition pertaining to the internal or external data; and

if the condition is satisfied, sending an alert to the user.

- 233. (New) The method of claim 140 wherein the criticality rating for a component in the plurality of components is based on one or more variables including profit impact of the component, a number of products that would be affected by a shortage of the component, and a current inventory level of the component.
- 234. (New) The method of claim 140 wherein the optimal inventory levels for the plurality of components are based on inventory holding costs, revenue impact of stocking out of the components, and warehouse constraints.
- 235. (New) The method of claim 140 wherein the one or more data sources internal to the enterprise include:
- a supplier database comprising information about suppliers of the plurality of components;
  - a contracts database comprising information about supplier contracts;
- an internal parts database comprising information about products incorporating the plurality of components;

a supply chain data database comprising information about inventory levels for the plurality of components, warehouse locations, and production schedules; and an enterprise resource planning (ERP) database comprising information about accounting ledgers and financial records related to the plurality of components.

236. (New) The method of claim 235 wherein the one or more data sources external to the enterprise include:

electronic product databases comprising information about products sold by one or more external suppliers, the information including pricing, availability, and lead time; and subscription sources comprising information about industry trends and market news.